



PATENT  
Attorney Docket No. ASC-001C1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Hammond *et al.*

SERIAL NO.: 10/688,003 GROUP NO.: Not yet assigned

FILING DATE: October 17, 2003 EXAMINER: Not yet assigned

TITLE: BACK-BIASING TO POPULATE STRAINED LAYER  
QUANTUM WELLS

**CERTIFICATE OF FIRST CLASS MAILING UNDER 37 C.F.R. 1.8**

I hereby certify that this correspondence, and any document(s) referred to as enclosed herein, is/are being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 28<sup>th</sup> day of January, 2004.

  
\_\_\_\_\_  
Emily Walsh

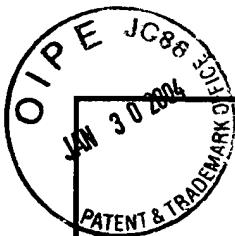
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith are:

1. Transmittal Form (1 pg.);
2. Information Disclosure Statement (2 pgs.);
3. Form PTO-1449 (1 pg.);
4. Cited References C1-C4; and
5. A Return Receipt Postcard.

3011673



# TRANSMITTAL FORM

Application Serial Number	10/688,003
Filing Date	October 17, 2003
First Named Inventor	Hammond
Group Art Unit	Not yet assigned
Examiner Name	Not yet assigned
Attorney Docket No.	ASC-001C1
Patent No.	Not applicable
Issue Date	Not applicable

## ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form <ul style="list-style-type: none"> <li><input type="checkbox"/> Check Attached</li> <li><input type="checkbox"/> Copy of Fee Transmittal Form</li> </ul>	<input type="checkbox"/> Copy of Notice to File Missing Parts of Application	<input type="checkbox"/> Notice of Appeal to Board of Patent Appeals and Interferences
<input type="checkbox"/> Amendment/Response <ul style="list-style-type: none"> <li><input type="checkbox"/> Preliminary</li> <li><input type="checkbox"/> After Final</li> <li><input type="checkbox"/> Affidavits/declaration(s)</li> <li><input type="checkbox"/> Letter to Official Draftsperson including Drawings [Total Sheets ____]</li> </ul>	<input type="checkbox"/> Formal Drawing(s)	<input type="checkbox"/> Appeal Brief (in triplicate)
<input type="checkbox"/> Petition for Extension of Time	<input type="checkbox"/> Request For Continued Examination (RCE) Transmittal	<input type="checkbox"/> Status Inquiry
<input checked="" type="checkbox"/> Information Disclosure Statement <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Form PTO-1449</li> <li><input checked="" type="checkbox"/> Copies of IDS Citations (C1-C4)</li> </ul>	<input type="checkbox"/> Power of Attorney (Revocation of Prior Powers)	<input checked="" type="checkbox"/> Return Receipt Postcard
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Certificate of First Class Mailing under 37 C.F.R. 1.8
<input type="checkbox"/> Sequence Listing submission <ul style="list-style-type: none"> <li><input type="checkbox"/> Paper Copy/CD</li> <li><input type="checkbox"/> Computer Readable Copy</li> <li><input type="checkbox"/> Statement verifying identity of above</li> </ul>	<input type="checkbox"/> Executed Declaration and Power of Attorney for Utility or Design Patent Application	<input type="checkbox"/> Certificate of Facsimile Transmission under 37 C.F.R. 1.8
	<input type="checkbox"/> Small Entity Statement	<input type="checkbox"/> Additional Enclosure(s) (please identify below)
	<input type="checkbox"/> CD(s) for large table or computer program	
	<input type="checkbox"/> Amendment After Allowance	
	<input type="checkbox"/> Request for Certificate of Correction <ul style="list-style-type: none"> <li><input type="checkbox"/> Certificate of Correction (in duplicate)</li> </ul>	

## CORRESPONDENCE ADDRESS

## SIGNATURE BLOCK

Direct all correspondence to: Patent Administrator  
 Testa, Hurwitz & Thibeault, LLP  
 High Street Tower  
 125 High Street  
 Boston, MA 02110  
 Tel. No.: (617) 248-7000  
 Fax No.: (617) 248-7100

Respectfully submitted,  
 Date: January 28, 2004  
 Reg. No. 44,381  
 Tel. No.: (617) 310-8327  
 Fax No.: (617) 248-7100

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

### INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. In accordance with the U.S. Patent Office's partial waiver of the requirement under 37 C.F.R. 1.98(a)(2)(i), only copies of the non-patent publications are enclosed.

### REMARKS

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed (CHECK ONE):

(1) within three (3) months of the **filings date** of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the **date of entry of the national stage** as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the **first Office action** on the merits, or before the mailing of a **first Office action** after the filing of a request for continued examination under 37 C.F.R. 1.114; or

(2) after the period defined in (1) but before the mailing date of a **final action** or a **notice of allowance** under 37 C.F.R. 1.311, and

- the requisite Statement is below, **OR**
- the requisite fee under 37 C.F.R. 1.17(p), namely **\$180.00**, is included herein,  
or
- (3) after the mailing date of a **final action or notice of allowance** but before the  
payment of the **issue fee**, **AND**
- the requisite Statement is below, **AND**
- the requisite petition fee under 37 C.F.R. 1.17(p), namely **\$180.00** is included  
herein.

It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

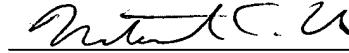
Applicants believe that no fees are due for this paper to be entered and considered, but the Commissioner is hereby authorized to charge Deposit Account No. 20-0531 for any required fees that may be due.

Respectfully submitted,

Date: January 28, 2004  
Reg. No. 44,381

Tel. No.: (617) 310-8327  
Fax No.: (617) 248-7100

3011695

  
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FORM PTO - 1449		ATTORNEY DOCKET NO.: ASC-001C1					
INFORMATION DISCLOSURE STATEMENT		APPLICANT(S): Hammond <i>et al.</i>					
		SERIAL NO.: 10/688,003					
		FILING DATE: October 17, 2003					
		GROUP: Not yet assigned					

## U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A1	4,908,681	03/13/1990	Nishida <i>et al.</i>			
	A2	5,534,713	07/09/1996	Ismail <i>et al.</i>			
	A3	5,557,231	09/17/1996	Yamaguchi <i>et al.</i>			
	A4	5,672,995	09/30/1997	Hirase <i>et al.</i>			
	A5	5,692,002	11/25/1997	Mizutani			
	A6	5,877,056	03/02/1999	Wu <i>et al.</i>			
	A7	6,040,208	03/21/2000	Honeycutt <i>et al.</i>			
	A8	6,284,615	09/04/2001	Pinto <i>et al.</i>			
	A9	6,310,367	10/30/2001	Yagishita <i>et al.</i>			
	A10	6,313,016	11/06/2001	Kibbel <i>et al.</i>			
	A11	6,448,840	09/10/2002	Kao <i>et al.</i>			
	A12	6,680,496	01/20/2004	Hammond <i>et al.</i>			07/08/2002

## FOREIGN PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY CODE	CLASS	SUB CLASS	FILING DATE	ABSTRACT ONLY	ENGLISH LANG (Y/N)

## OTHER ART, JOURNAL ARTICLES, ETC.

EXAM. INIT.	OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)							
	C1	Burd <i>et al.</i> , "A Dynamic Voltage Scaled Microprocessor System," IEEE Journal of Solid-State Circuits, Vol. 35, No. 11 (November 2000), pp. 1571-1580.						
	C2	Gonzalez <i>et al.</i> , "Supply and Threshold Voltage Scaling for Low Power CMOS," IEEE Journal of Solid-State Circuits, Vol. 32, No. 8 (August 1997), pp. 1210-1216.						
	C3	Miyazaki <i>et al.</i> , "A Delay Distribution Squeezing Scheme with Speed-Adaptive Threshold-Voltage CMOS (SA-Vt CMOS) for Low Voltage LSIs," ISLPED'98 (International Symposium on Low Power Electronics and Design), pp. 48-53.						
	C4	von Kaenel <i>et al.</i> , "Automatic Adjustment of Threshold & Supply Voltages for Minimum Power Consumption in CMOS Digital Circuits," IEEE Symposium on Low Power Electronics (1994), pps. 78-79.						

EXAMINER	DATE CONSIDERED
3011002	